

WHAT IS CLAIMED IS:

- 1 1. An extended rotary operating mechanism for a circuit breaker having a
2 movable operating handle coupled to a shaft and electrical contacts, the extended
3 rotary operating mechanism comprising:
4 a handle operator defining a socket;
5 a blocking plate mounted in the socket, the blocking plate including a
6 blocking shape; and
7 a shaft adaptor coupled to the blocking plate and the shaft, wherein if
8 the electrical contacts are welded closed and a torque is applied to the handle
9 operator, the blocking shape prevents the handle operator from being locked in an
10 “OFF” position, independently of the operating handle position, by covering a locking
11 hole.
- 1 2. The extended rotary operating mechanism of claim 1, wherein the
2 socket is configured to allow the handle operator at least 3° up to 8° of rotary motion
3 before the blocking plate is moved into a blocking position.
- 1 3. The extended rotary operating mechanism of claim 1, wherein the
2 handle operator is operated manually.
- 1 4. The extended rotary operating mechanism of claim 1, including a
2 locking pin configured to engage the locking hole to lock the handle operator in the
3 “OFF” position.
- 1 5. The extended rotary operating mechanism of claim 1, wherein the
2 blocking plate and shaft adaptor rotate together as the handle operator is moved.
- 1 6. The extended rotary operating mechanism of claim 1, wherein the shaft
2 adaptor is coupled to the shaft with fasteners.
- 1 7. The extended rotary operating mechanism of claim 1, wherein the
2 blocking plate and shaft adaptor are composed of metal.

1 8. The extended rotary operating mechanism of claim 1, wherein the shaft
2 adapter includes one of an extended socket and a recessed socket configured to
3 engage to the shaft.

1 9. A method for preventing an operating handle of a circuit breaker from
2 being locked in an "OFF" position when electrical contacts of the circuit breaker are
3 welded closed, with the circuit breaker having a shaft coupled to the operating handle,
4 the method comprising the steps of:

5 providing a handle operator having a socket and a mounting plate
6 defining a locking hole;

7 providing a blocking plate having a blocking shape and configured to
8 fit in the socket;

9 providing a shaft adaptor;

10 coupling the shaft adaptor to the blocking plate and the shaft; and

11 covering the locking hole with the blocking shape when a torque is
12 applied to the handle operator.

1 10. The method for preventing an operating handle of a circuit breaker
2 from being locked of claim 9, including the step of rotating the handle operator up to
3 6° before the blocking plate is moved to block the locking hole.

1 11. The method for preventing an operating handle of a circuit breaker
2 from being locked of claim 9, including the step of operating the handle operator
3 manually.

1 12. The method for preventing an operating handle of a circuit breaker
2 from being locked of claim 9, wherein the shaft adaptor includes one of an extended
3 socket and a recessed socket configured to engage the shaft.

1 13. The method for preventing an operating handle of a circuit breaker
2 from being locked of claim 12, including the steps of providing fasteners to secure the
3 shaft adaptor to the shaft and securing the shaft to the shaft adaptor.

- 1 14. An extended rotary operating mechanism for a circuit breaker having a
2 movable operating handle coupled to a shaft, and electrical contacts, the operating
3 rotary operating mechanism comprising:
4 a means for rotating defining a socket;
5 a means for blocking mounted in the socket; and
6 a means for coupling operatively connected to the means for blocking
7 and the shaft, wherein if the electrical contacts are welded closed and a torque is
8 applied to the means for rotating, the means for blocking prevents the means for
9 rotating from being locked in an "OFF" position, independently of the operating
10 handle position, by covering a locking hole.
- 1 15. The extended rotary operating mechanism of claim 14, wherein the
2 socket is configured to allow the means for rotating at least 3° up to 8° of rotary
3 motion before the means for blocking is moved into a blocking position.
- 1 16. The extended rotary operating mechanism of claim 14, wherein the
2 means for rotating is operated manually.
- 1 17. The extended rotary operating mechanism of claim 14, including a
2 locking pin configured to engage the locking hole to lock the means for rotating in the
3 "OFF" position.
- 1 18. The extended rotary operating mechanism of claim 14, wherein the
2 means for blocking and means for coupling rotate together as the means for rotating is
3 moved.
- 1 19. The extended rotary operating mechanism of claim 14, wherein the
2 means for coupling is operatively connected to the shaft with fasteners.
- 1 20. The extended rotary operating mechanism of claim 14, wherein the
2 means for blocking and means for coupling are composed of metal.